



ENTERPRISE
IP VIDEO SURVEILLANCE
SOLUTIONS

THE VIDEO SURVEILLANCE MARKET

Overpriced Brands

- Very Expensive Products
- Smaller Market and Difficult to Sell
- Slow Sales Cycle
- Brand over Product Performance

- High Profits and Less Competition
- Gain Customer Loyalty
- Value for Money
- Quick Support
- Faster Sales Cycle

Matrix SATATYA

Cheap Products

- Low Profits and Very High Competition
- Loss of Your Credibility
- Lose Customer in the Long Run
- Inferior Quality and Lack of Support

ABOUT MATRIX



- Established in 1991
- Products: 60+ Telecom and Security Solutions
- Global Presence: 40+ Countries
- Multi-location Installations with: 500+ Channel Partners
- No of Employees: 500+
- Awards and Achievements: 25+ for Excellence in Product Engineering, Design and Innovation



R&D CENTER

77,000 Sq.Ft

More than 40% Manpower in R&D,
700+ Man-years of R&D Experience
World-class Technology Platform
and Processes



CORPORATE OFFICE

Based at Vadodara, Gujarat, India
Departments: Marketing, Sales,
Product Management, Support,
Finance,
Customer Care, Purchase



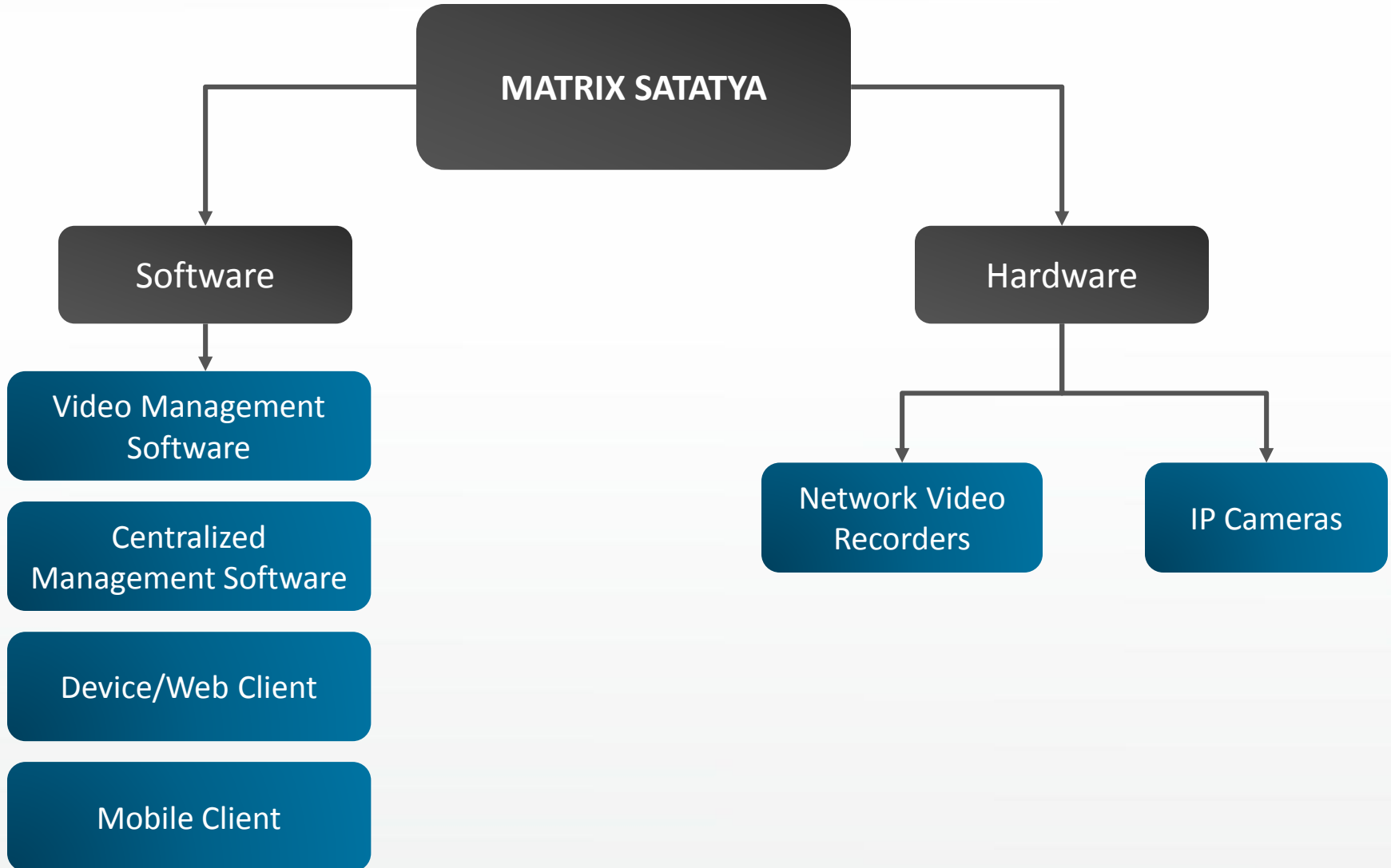
MANUFACTURING UNIT

73,000 Sq.Ft
100+ Work Stations
International Quality Systems and
Processes



MATRIX SATATYA PRODUCT RANGE

PRODUCT RANGE



SAMAS VARIANTS

CATEGORY	SATATYA SAMAS PLATFORM		
	GE	ME	LE
Inbuilt Cameras	20	50	200
Maximum Camera Supported	100	250	100000
Inbuilt Simultaneous Users	2	5	5
Maximum Simultaneous Users	1000	1000	1000
Maximum Number of Cameras per Server	255	255	255
Devices per Management Server	10000	10000	10000

SAMAS MODULES			
1. Intelligent Video Analytics	2. Multi display	3. Parking Management	4. Access Control Integration

NETWORK VIDEO RECORDERS VARIANTS

NVR Standard
NVR8S
NVR64S

NVR8S
Rear



NVR8S
Front



NVR Premium
NVR24P
NVR64P

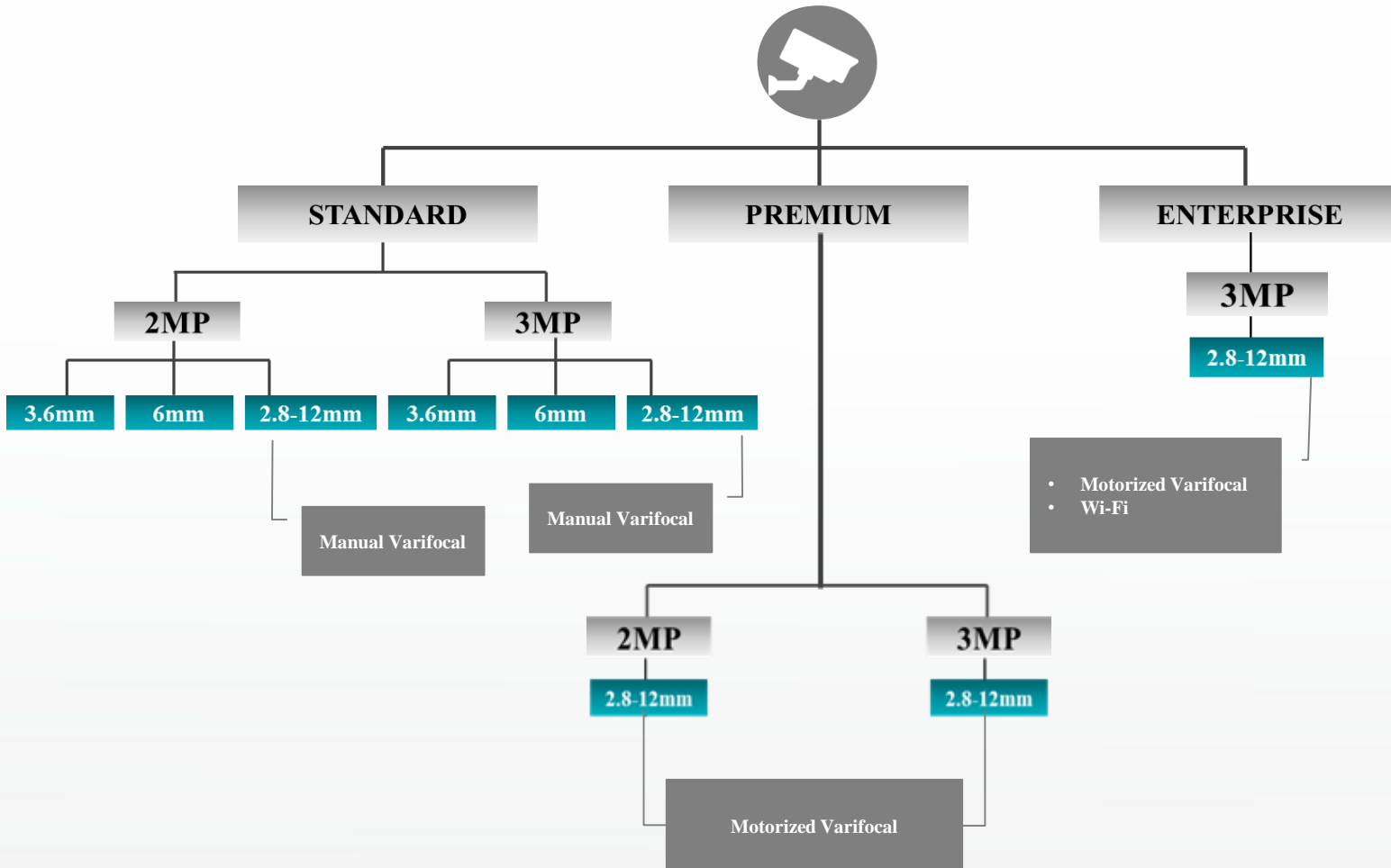
NVR64P
Rear



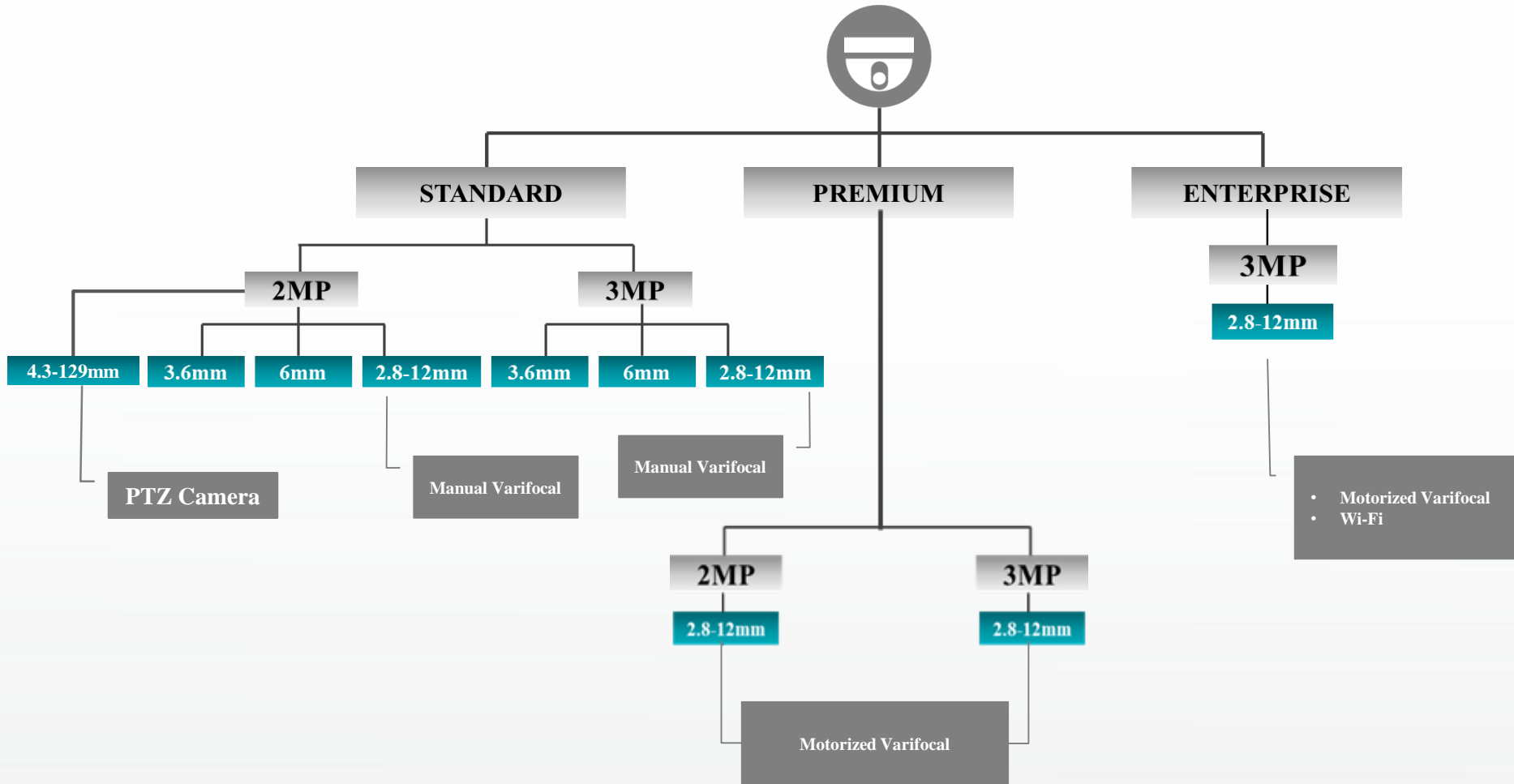
NVR64P
Front



BULLET CAMERA VARIANTS



DOME CAMERA VARIANTS





 **MATRIX**
SECURITY SOLUTIONS

MATRIX SATATYA USP

SATATYA SAMAS BENEFITS



Scalable: 1,00,000 Cameras, 10,000 Devices, 1,000 Recording Servers

Distributed Architecture: Simultaneous Local & Central Monitoring with no License required for Recording Server



Flexibility: Cam-wise User Login Roles & Rights, Both IP & Analog Camera Support and Direct Camera Connection Support

Interoperability: Supports all ONVIF and RTSP compliant cameras. Web API for third party Integration.





 **MATRIX**
SECURITY SOLUTIONS

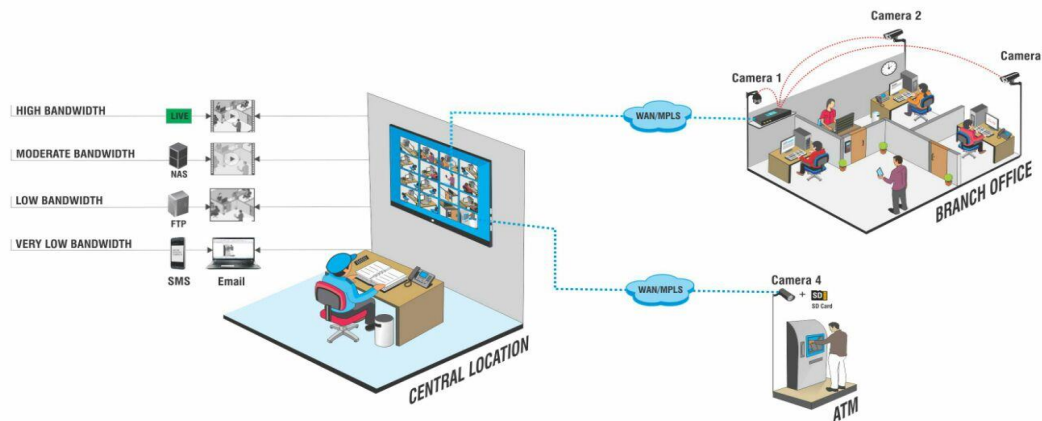
SATATYA SAMAS USP

CENTRALIZED VISIBILITY

Greater Visibility across Multiple Locations, Easy Centralized Management and Monitoring

Edge Recording with Notification at Central Location

Edge Recording with Matrix Video Surveillance



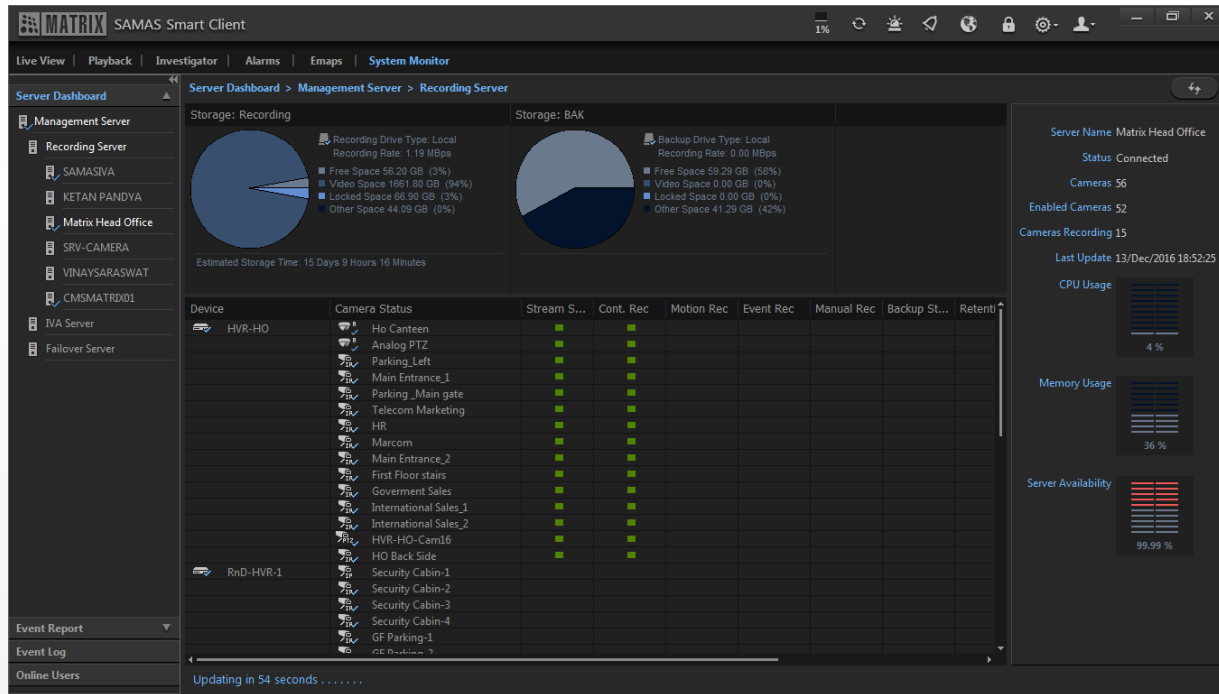
BENEFITS:

- Edge Storage in Video Recorders and Cameras is Supported
- Centralized Playback and Investigation of Branch Offices using Locally Stored Data
- Very Low Bandwidth Required for Centralized Monitoring and Management of all Branch Offices
- Export Event based Video Clip/Snapshot to Central Location on NAS/FTP

CENTRALIZED CONTROL

Greater Control over Functioning of Multiple Cameras Spread Across Multiple Locations

Health Status Report, User-based Roles and Rights, Summary Report



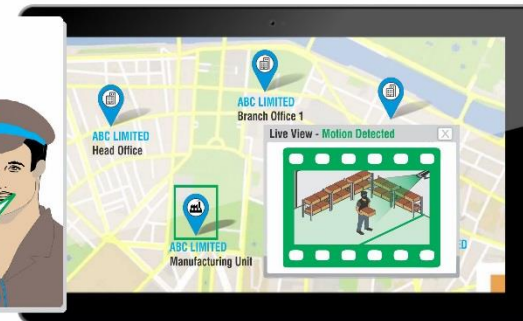
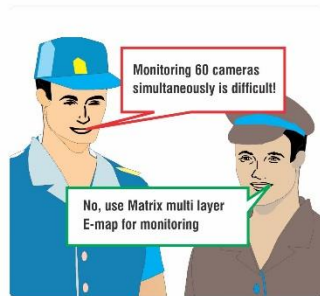
The screenshot displays the MATRIX SAMAS Smart Client interface. The top navigation bar includes 'Live View', 'Playback', 'Investigator', 'Alarms', 'Emaps', and 'System Monitor'. The main dashboard is titled 'Server Dashboard > Management Server > Recording Server'. It features two pie charts for storage status: 'Storage: Recording' and 'Storage: BAK'. Below these are system metrics for 'Recording Drive Type' and 'Backup Drive Type'. A table lists camera status for various devices, and the right sidebar shows server name, status, camera counts, and usage metrics.

Device	Camera Status	Stream S...	Cont. Rec	Motion Rec	Event Rec	Manual Rec	Backup St...	Retenti
HVR-HO	Ho Canteen	■	■					
	Analog PTZ	■	■					
	Parking_Left	■	■					
	Main Entrance_1	■	■					
	Parking_Main gate	■	■					
	Telecom Marketing	■	■					
	HR	■	■					
	Marcom	■	■					
	Main Entrance_2	■	■					
	First Floor stairs	■	■					
	Government Sales	■	■					
	International Sales_1	■	■					
	International Sales_2	■	■					
	HVR-HO-Cam16	■	■					
	HO Back Side	■	■					
	RnD-HVR-1	Security Cabin-1	■	■				
Security Cabin-2		■	■					
Security Cabin-3		■	■					
Security Cabin-4		■	■					
	GF Parking-1	■	■					
	GF Parking-2	■	■					

EASE OF MONITORING

Easy Centralized Monitoring, Easy Viewing of Multiple Cameras on a Single Screen

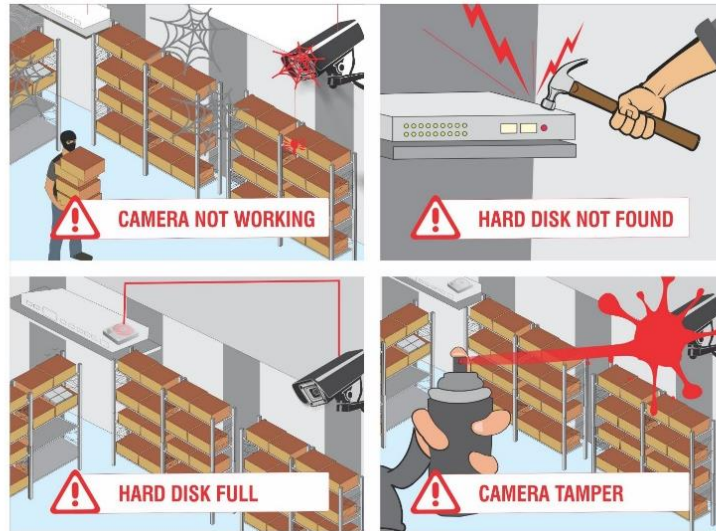
E-map, Multi-display, Daily Highlights



INSTANT NOTIFICATIONS

Proactive Solution, Reactive Security, Notifies the Right Person at the Right Time

Video Pop-up, Email with Snapshot, SMS, Audio Alarms, Buzzers, etc.



Other Solutions



Matrix Solutions

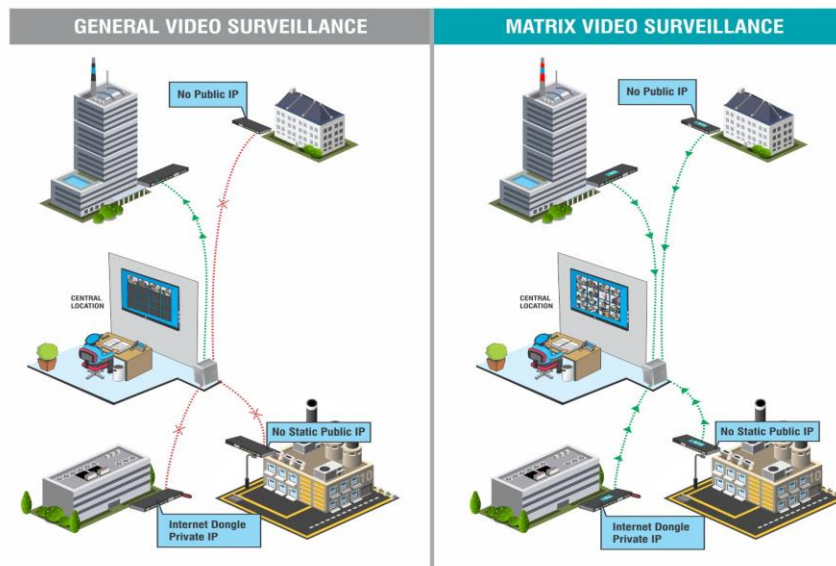


OPTIMIZED BANDWIDTH

Reduce Recurring Cost of Bandwidth, No Public IP Required

Device Initiation, Adaptive Recording, Configurable Bit-rate

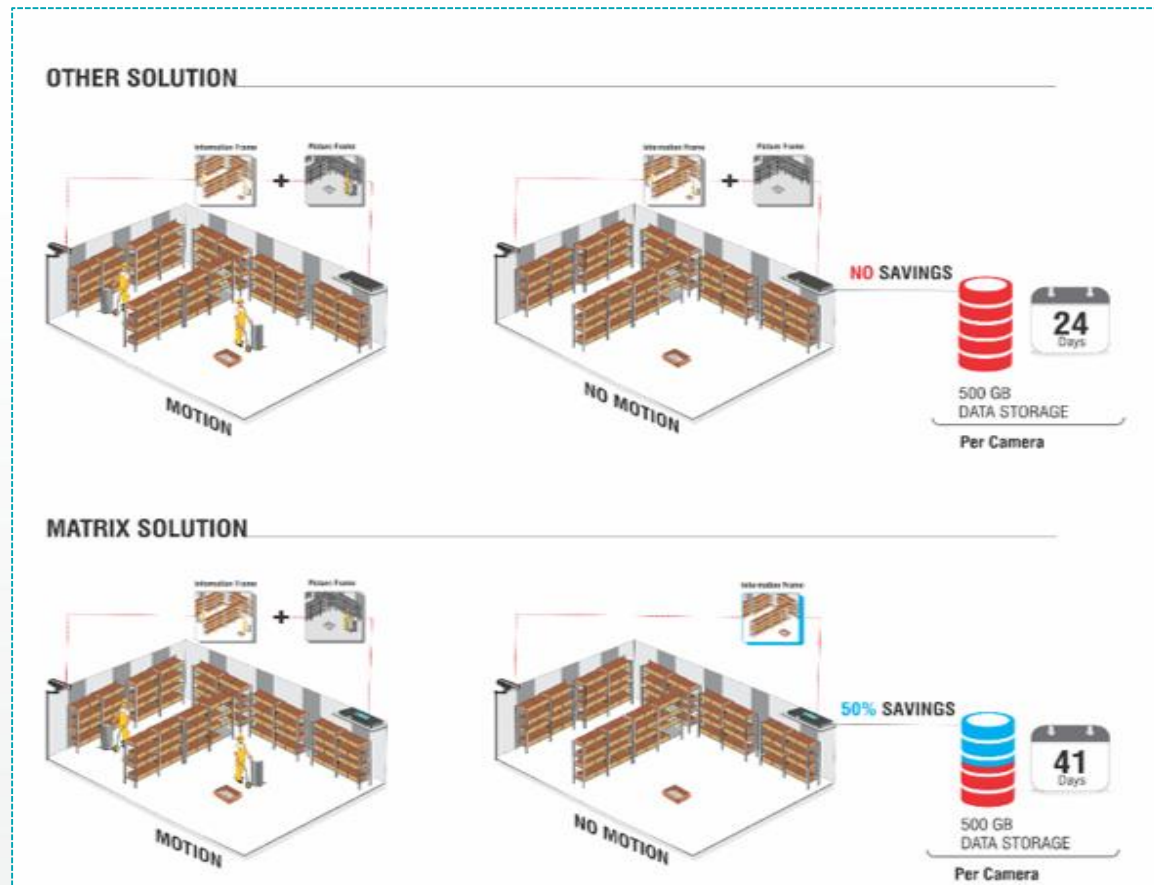
NO PUBLIC IP REQUIRED



OPTIMIZED STORAGE

Reduce Storage Requirement by up to 50%, Get Higher Storage Days

Adaptive Recording, Camera-wise Recording Retention, Two Level Data Compression & Archiving



INTEGRATED SECURITY

Synchronous Functioning, Prevent Unauthorized Access, Quick Search of Records, Bookmark Evidence Clips

Integration with Access Control, Fire alarms and other Sensors

STORE SNAPSHOT ON FTP/NAS



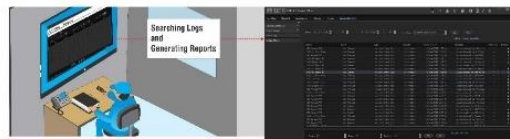
START RECORDING ON NAS



ACCESS GRANTED FROM SECURITY



GENERATE REPORTS OF 'ACCESS DENIED'

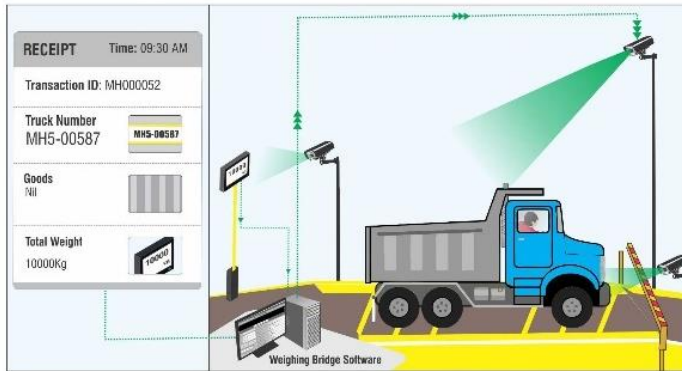





PROCESS AUTOMATION

Synchronous Functioning, Automate System, Eliminate Manipulation, Quick Search of Records

Integration with Weigh Bridge, POS, Dispatch System, Visitor Management, etc.

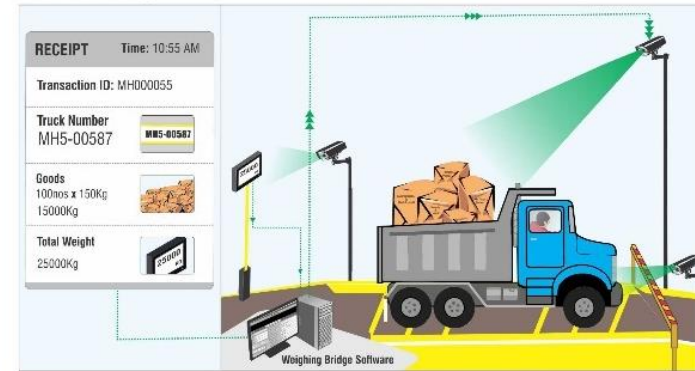
Before Loading






RECEIPT		Time: 09:30 AM
Transaction ID: MH000052		
Truck Number	MH5-00587	
Goods	Nil	
Total Weight	10000Kg	

Weighing Bridge Software

After Loading



RECEIPT		Time: 10:55 AM
Transaction ID: MH000055		
Truck Number	MH5-00587	
Goods	100nos x 150Kg 15000Kg	
Total Weight	25000Kg	

Weighing Bridge Software



Screenshot



Video



Transaction ID: MH000055

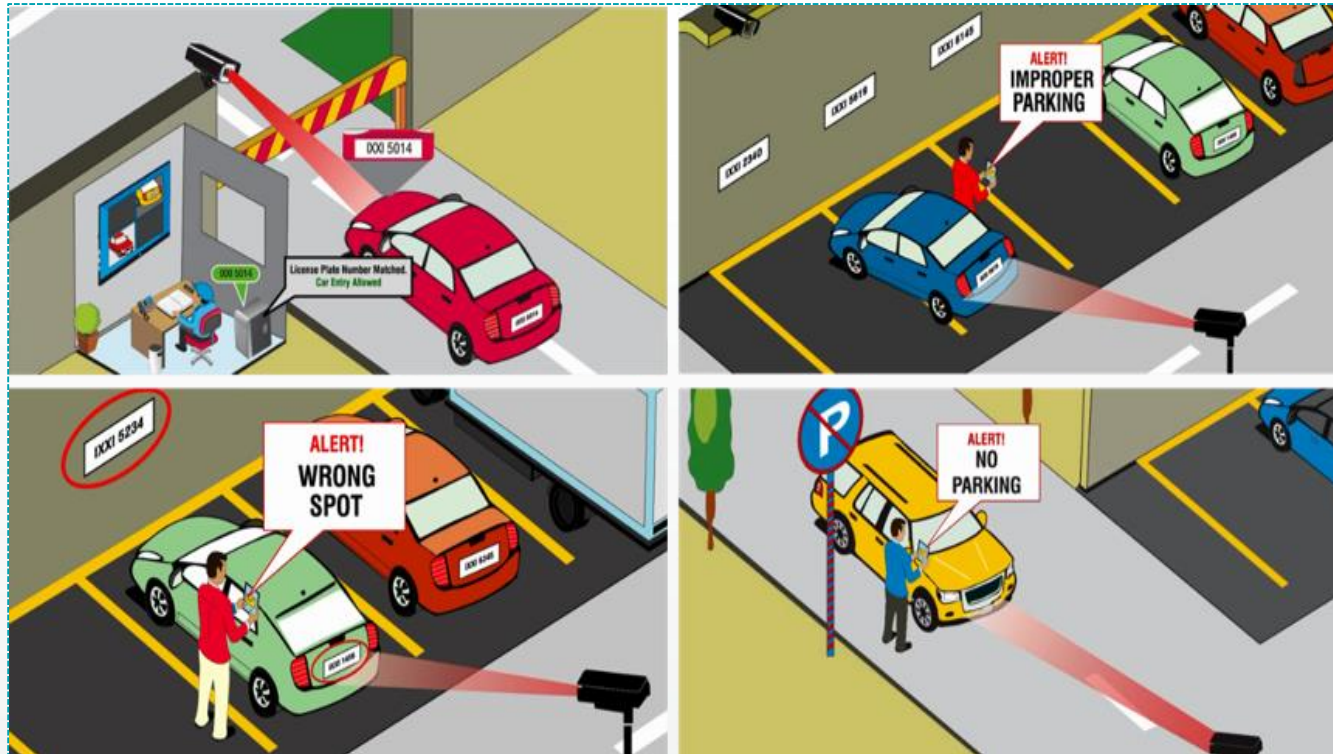
Control Room

RECEIPT		Time: 10:55 AM
Transaction ID: MH000055		
Truck Number	MH5-00587	
Goods	100nos x 150Kg 15000Kg	
Total Weight	25000Kg	

PARKING MANAGEMENT

Parking Space Optimization, Automate Parking

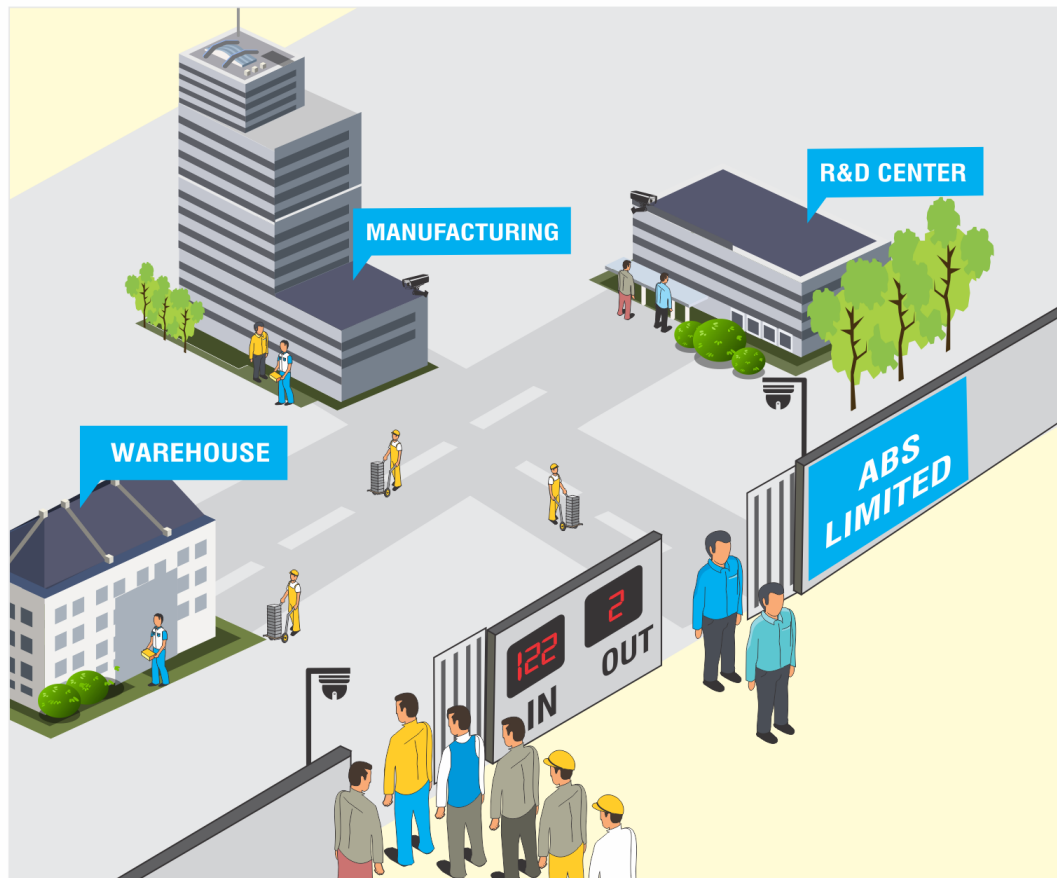
License Plate Recognition with Blacklist and Whitelist, Vehicle Counting, Unauthorized Parking, Improper Parking, Wrong Way Parking and Prohibited Parking



CROWD MANAGEMENT

Occupancy Control, Easy Crowd Management, Employee Safety, Avoid Tail-gating

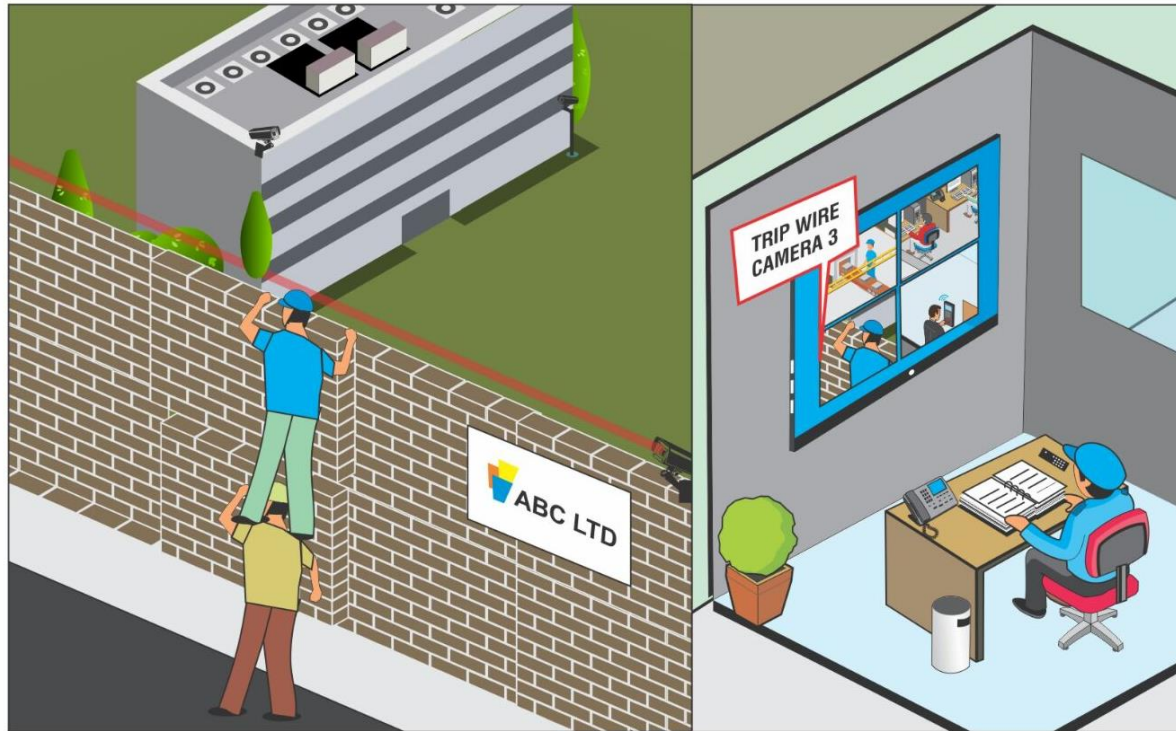
Face Detection, People Counting, Tail-gating Detection and Loitering



PERIMETER SECURITY

24x7 Security of Outdoor Properties, Secure Premises, Asset Protection

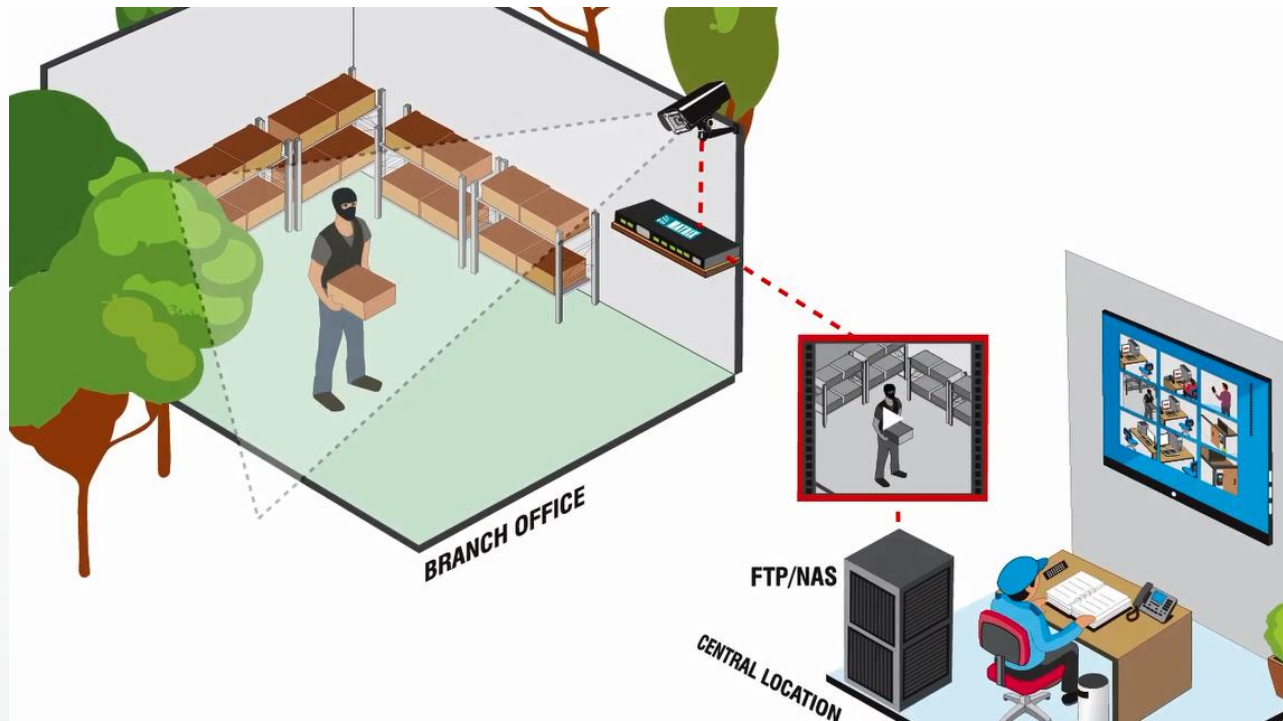
Intrusion Detection, Trip Wire, Missing Object Detection and Tail-gating



DATA SECURITY

Safeguard Data Against Breakdowns, Safeguard Evidence

Backup over NAS/FTP, Redundant Server, Evidence Lock, Clip Export and SSL Communication



MATRIX SATATYA VIDEO RECORDERS BENEFITS



Recording Resolution: Up to 5MP

Throughput: 48Mbps to 354Mbps(Depending on the number of channels)



Storage Capability: 6TB-24TB(Depending on the number of channels)

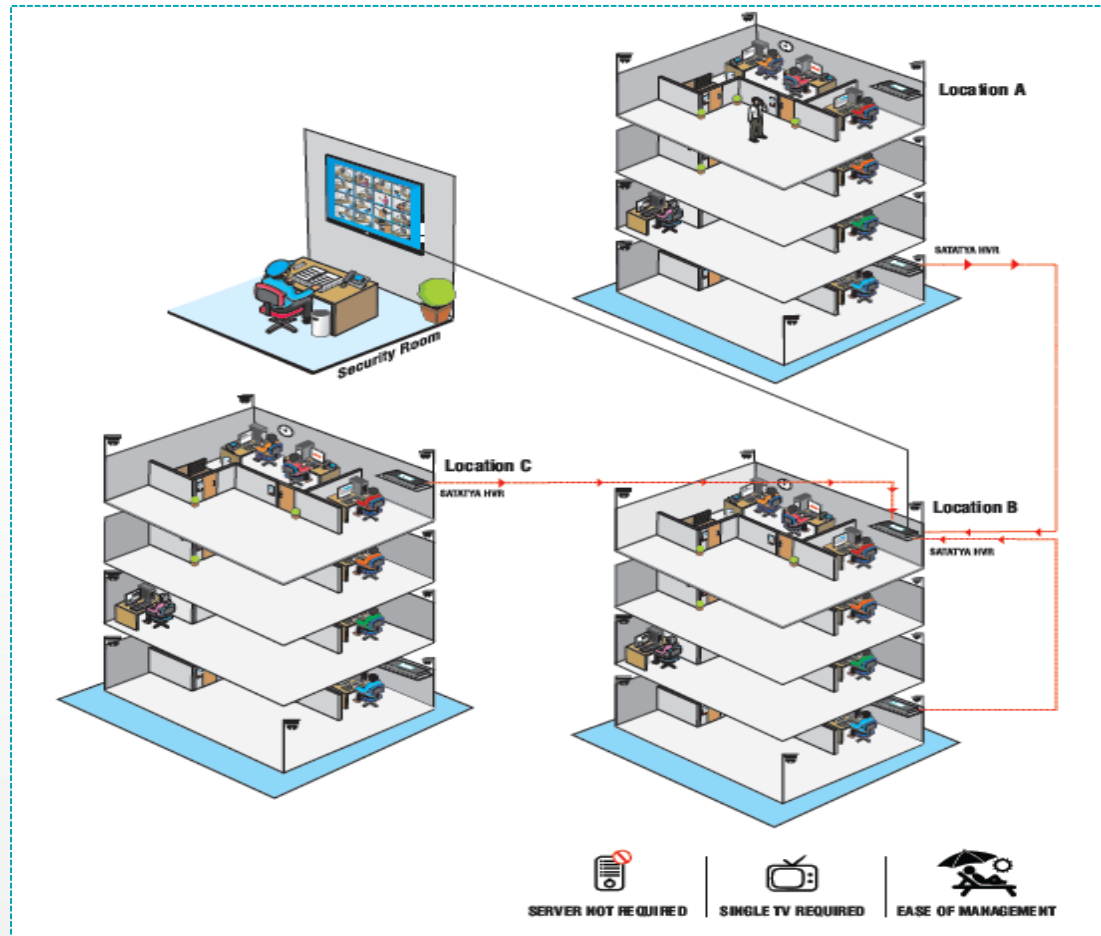
Interoperability: Supports all ONVIF or RTSP compliant cameras



CENTRALIZED MONITORING

Easy Centralized Monitoring of Multiple Cameras, Ease of Management

Cascading, Sequencing and Camera Grouping, E-map



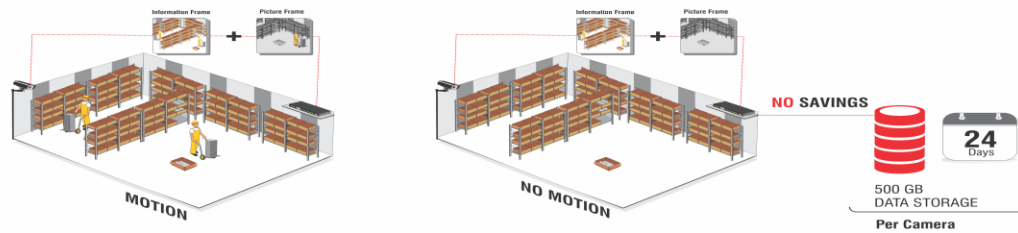
OPTIMIZED STORAGE

Reduce Storage Requirement by up to 50%, Get Higher Storage Days

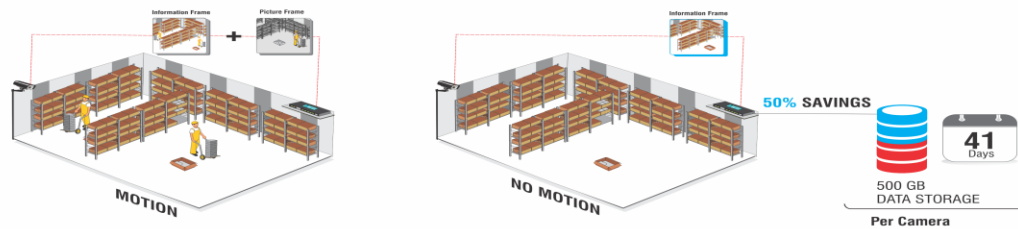
Adaptive Recording, Camera-wise Recording Retention, Two Level Data Compression & Archiving

SAVE UP TO 50% ON STORAGE SPACE WITH MATRIX VIDEO SURVEILLANCE

OTHER SOLUTION



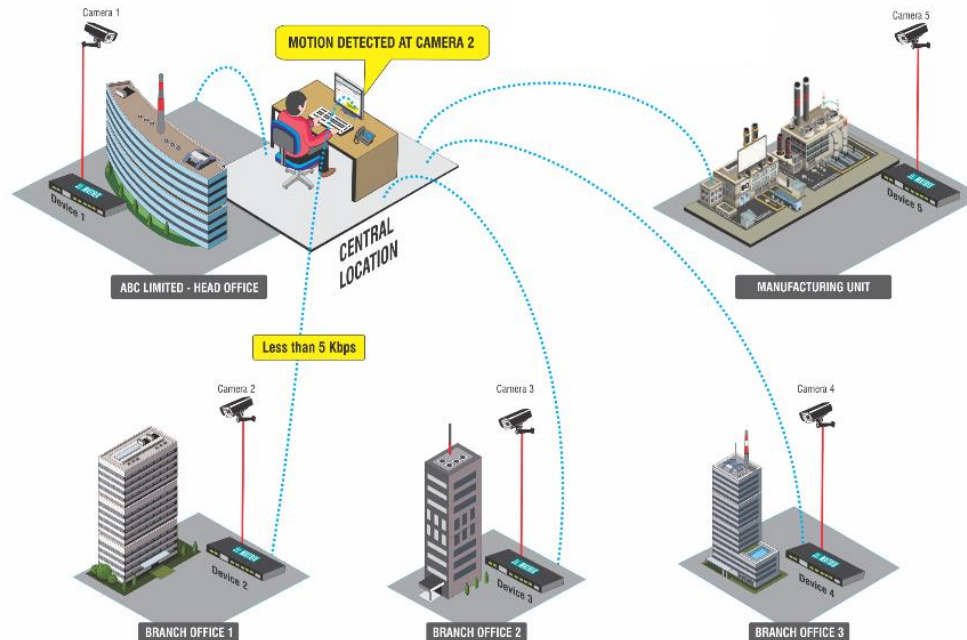
MATRIX SOLUTION



CENTRALIZED CONTROL

Greater Control of Multiple Cameras Spread Across Multiple Locations

TCP Based Notifications, Device Monitor, User-based Roles and Rights



INSTANT NOTIFICATIONS

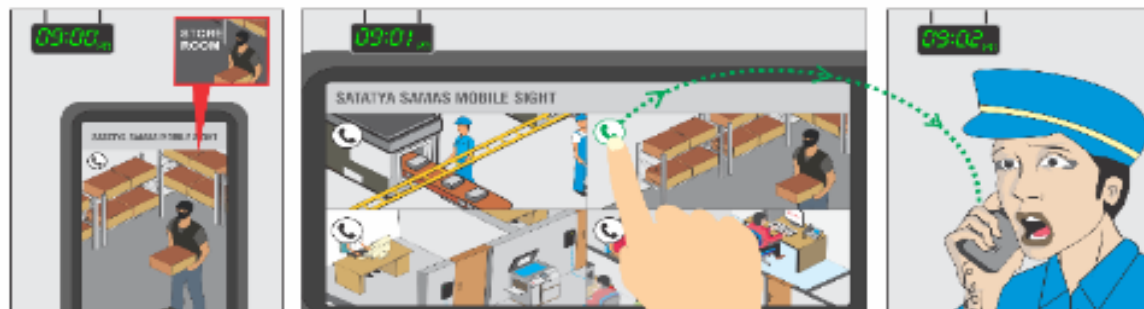
Proactive Solution, Reactive Security, Notifies the Right Person at the Right Time

Calling from Mobile App, Email with Snapshot, SMS, Audio Alarms, Buzzers, etc.

Other Video Surveillance Solution



Matrix Video Surveillance Solution



INTEGRATED SOLUTION

Eliminate Unauthorized Access, Quick Search of Records

Integration with Access Control

STORE SNAPSHOT ON FTP/NAS



START RECORDING ON NAS



ACCESS GRANTED FROM SECURITY



GENERATE REPORTS OF 'ACCESS DENIED'



MATRIX SATATYA IP CAMERAS BENEFITS



Superior Image Quality: Back-illuminated SONY Sensors of STARVIS Series with EXMO Technology

Push Technology: Camera initiating connection eliminates the cost of Public IP



Storage and Bandwidth Optimization: Smart features like Adaptive Streaming, Quad Stream Support and ROI helps in saving huge bandwidth and storage

Preventive Security: Early detection and instant notifications of suspicious events



CONNECTIVITY

1. Push Technology: In push technology, communication with the server is initiated from camera's end, which reduces load on the server and helps in interrupted network connection (In other traditional devices server has to poll at regular interval which increases server load at great extent)
Whenever devices are connected in multi locations, public IP is required only at Server End. This makes multi-location deployment of devices very easy, cost effective and time bound. Push technology reduces server load using limited socket connections as per requirement with poll.

2. Two-way Audio: A mic and a speaker is attached/connected with the camera at the audio-in and out ports respectively and two way functioning can be performed.

IMAGE QUALITY

1. SONY STARVIS series sensors: The sensor is made with SONY's patent EXMOR Technology wherein the sensor is back-illuminated, which results in less dark current thereby giving exceptionally good color image reproduction at as low as 0.02lux.

2. True WDR: The camera smartly varies its exposure time and rectifies the over-exposed and under-exposed areas in the scene thus giving more informative and clear image.

3. 2D and 3D Noise Reduction Technique: Analyzes frames of video, using special algorithm filter to mitigate the effects of noise. This noise reduction can not only improve the image quality when security cameras work in low light conditions, but also reduce the file sizes of captured video, the reduced file size decreases storage needs, also reduce the bandwidth requirement for video streaming.

4. E-PTZ and Digital zoom functionality: E-PTZ enables pan, tilt and zoom of a camera even though the camera does not physically move. Users are still able to digitally zoom and navigate the camera's viewable area. This helps users to have an even more detailed and richer surveillance experience.

OPTIMIZATION

1. **Adaptive Streaming:** Records at lower bit-rate during non-activity period.

2. **Smart Streaming:** Streaming is a technology which divides a single stream into multiple resolutions based on its importance.

3. **Region of Interest:** Allows streaming and recording of only critical from the entire image.

4. **Four Stream Support:** Different streams for viewing storing and recording. This helps in best utilization of allotted bandwidth.

5. **H.265:** Latest Video Compression Technique

6. **SD Card Support:** up to 64GB

EVENTS AND ALERTS

EVENTS:

1. Motion Detection
2. Intrusion Detection
3. Trip Wire
4. Camera Tamper
5. Network Disconnect
6. IP Conflict
7. Storage Alert

ALERTS:

1. Upload Image/Clip
2. Pre and Post alarm recording
3. Snapshot schedule
4. Email with snapshot
5. SMS

SUMMARY

PROBLEMS	FEATURES	BENEFITS
Lack of Visibility	Edge Recording with Notification at Central Location	Centralized Visibility
Lack of Control	TCP based notifications, Health status monitoring, User-based Roles & Rights	Centralized Control
Complex Monitoring	Cascading, Sequencing & Camera Grouping Daily Highlights, Multi display, E-map	Easy Centralized Monitoring
High Storage & Bandwidth	Adaptive recording, camera-wise recording retention, two level data compression, Multi Streaming, CBR/VBR, No Public IP, Cascading	Optimized Bandwidth & Storage
Disparate Solution	Integration with Access Control, Weigh Bridge, POS, Parking/Visitor Management, Dispatch System	Data Security
Passive Security	Face detection, Motion & No Motion Detection, Trip-wire, Missing Object, Intrusion, Loitering, Calling from Mobile, SMS, Email with Snapshot, Video Pop-up, alarm & Buzzer	Proactive Solution
Inefficiency & Underutilization	Crowd Management, Parking Management	Improved Productivity
Loss of Data	Redundancy, SSL Communication	Data Security



Success Stories

ENTERPRISES WHICH SECURED ITS BUSINESS THROUGH
MATRIX IP VIDEO SURVEILLANCE

BTI PAYMENTS

Requirement

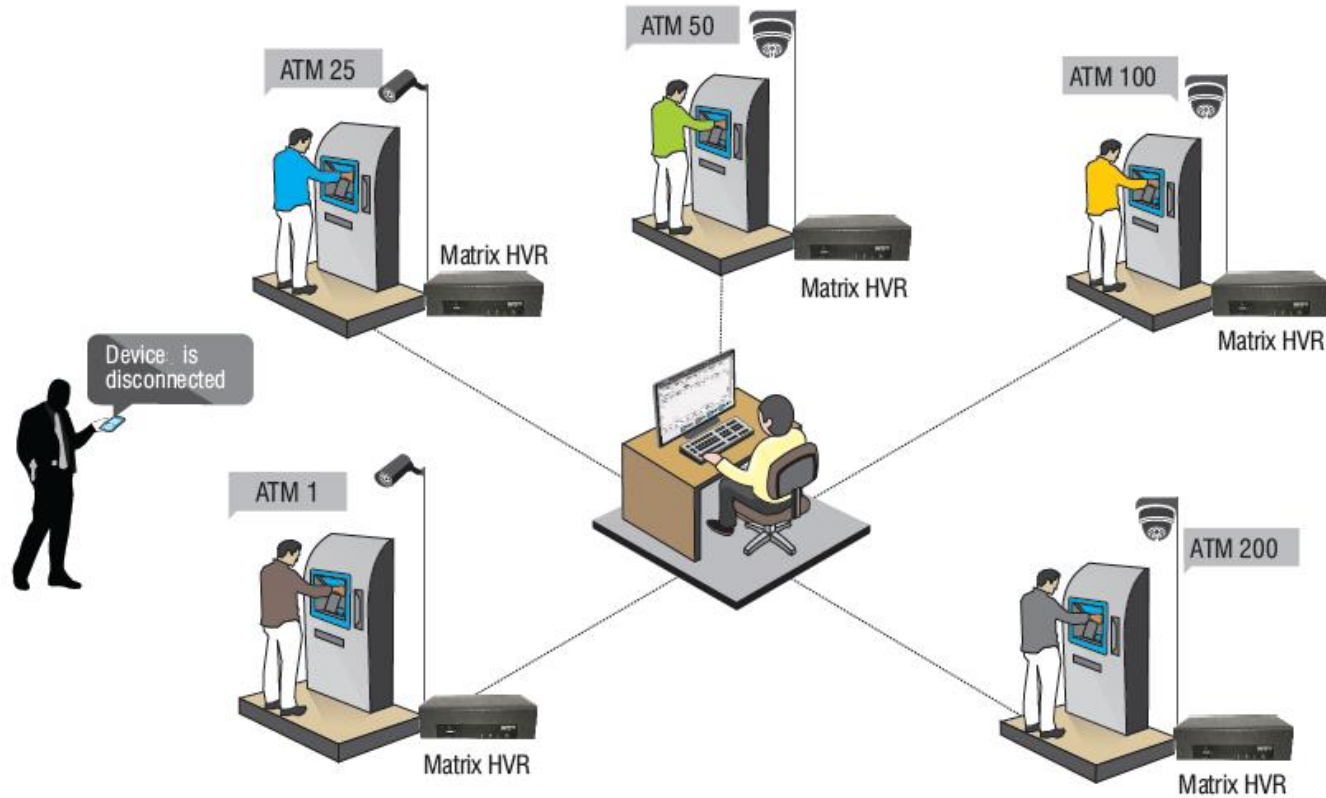
- Centralized Management with Limited Bandwidth of 32Kbps at Remote Locations
- Reduction in the cost of public IP, because of installation of devices and cameras at 200+ remote locations across India

Solution

- ❖ TCP Based Notifications
- ❖ Edge Recording
- ❖ Device Initiation

Description

- TCP Based Notification was installed to obtain Notifications on a Central Server
 - This Device Monitor takes < 5kbps Bandwidth to Communicate
 - Alerts on Device/Camera Disc, Motion/Sensor Alerts
 - Alerts on Hard disk Error, Recording Stop
- Pre and Post event based clips sent at central location on occurrence of any event with Edge Recording
- Device initiation eliminated the need for static public IP at each location thereby saving on the recurring cost of Public IP(AED 3000x200 = AED600000 per year)





CUSTOMER LIST

A FEW CUSTOMERS



A FEW CUSTOMERS



A FEW CUSTOMERS

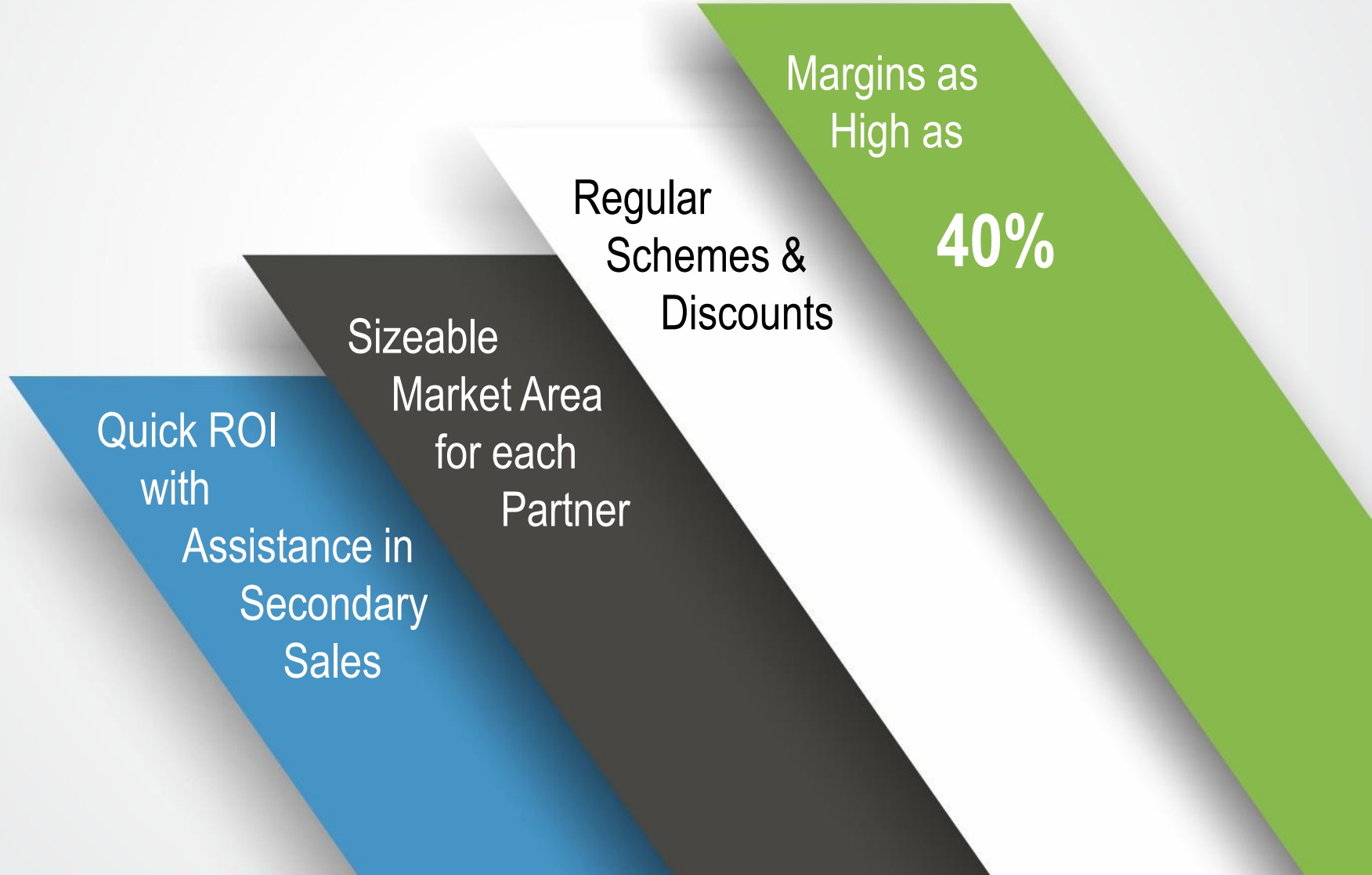




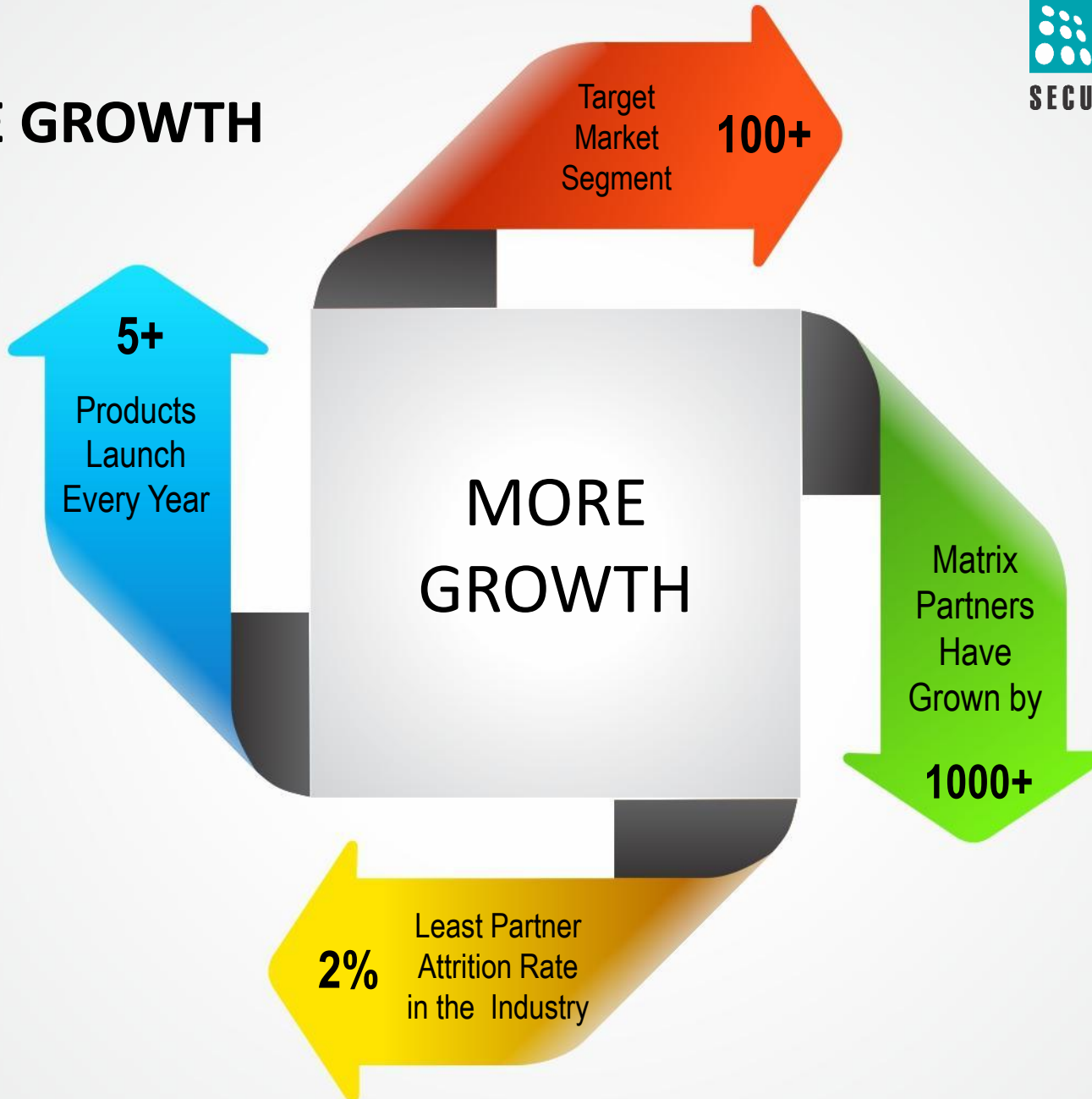
PROFIT FROM
 **PARTNERSHIP**

**ADVANTAGE
MATRIX**

MORE PROFIT



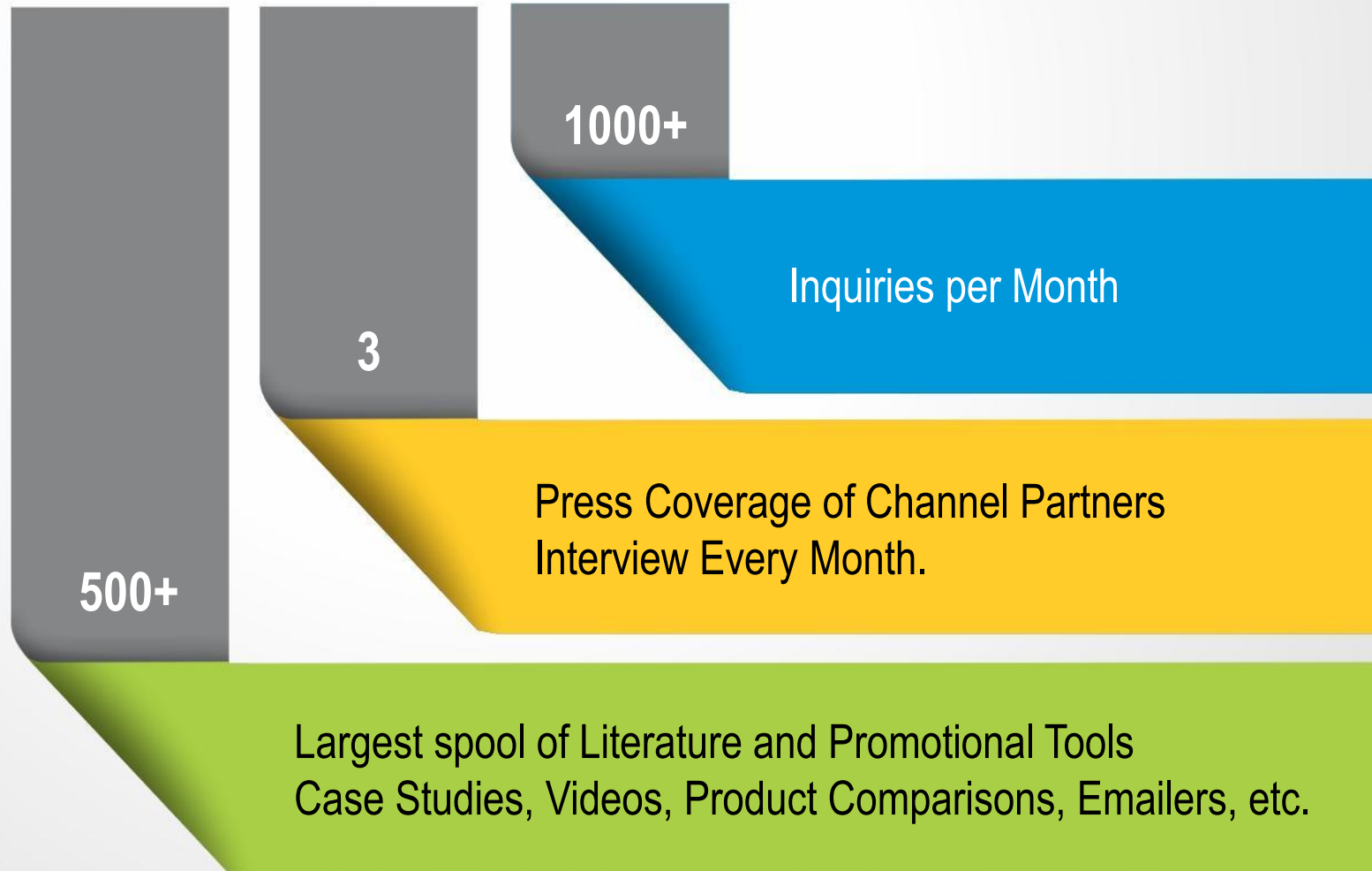
MORE GROWTH



MORE SUPPORT



MORE MARKETING ASSISTANCE



MORE OPPORTUNITY

500,000+
Loyal Customers Base

Very High Scope for
Repeat Sales

MORE
OPPORTUNITY

98% Satisfaction Level

Wider Brand Penetration



THANK YOU